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Adequate Yearly Progress (AYP): Implementation of the No Child Left Behind Act

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Summary

Title I, Part A of the Elementary and Secondary Education Act (ESEA), authorizes financial aid to local educational agencies (LEAs) for the education of disadvantaged children and youth at the preschool, elementary, and secondary levels. Over the last several years, the accountability provisions of this program have been increasingly focused on achievement and other outcomes for participating pupils and schools. Since 1994, and particularly under the No Child Left Behind Act of 2001 (NCLBA), a key concept embodied in these requirements is that of “adequate yearly progress (AYP)” for schools, LEAs, and states. AYP is defined primarily on the basis of aggregate scores of various groups of pupils on state assessments of academic achievement. The primary purpose of AYP requirements is to serve as the basis for identifying schools and LEAs where performance is unsatisfactory, so that inadequacies may be addressed first through provision of increased support and, ultimately, a variety of “corrective actions.”

Under the NCLBA, the Title I-A requirements for state-developed standards of AYP were substantially expanded in scope and specificity. Under the NCLBA, AYP calculations must be *disaggregated* — i.e., determined separately and specifically for not only all pupils but also for several demographic groups of pupils within each school, LEA, and state. In addition, while AYP standards had to be applied previously only to pupils, schools, and LEAs participating in Title I-A, AYP standards under the NCLBA must be applied to *all* public schools, LEAs, and to states overall, if a state chooses to receive Title I-A grants. However, corrective actions for failing to meet AYP standards need only be applied to schools and LEAs participating in Title I-A. Another major break with the past is that state AYP standards must now incorporate concrete movement toward meeting an *ultimate goal* of all pupils reaching a proficient or advanced level of achievement within 12 years.

The overall percentage of public schools identified as failing to make AYP based on test scores in 2002-2003 was approximately 31% of *all* public schools. The percentage for individual states varied from 5% to 76%. A separate survey found that 6,079 Title I-A participating schools (11.9% of the total) were in the “needs improvement” status (i.e., they had failed to meet AYP standards for two or more consecutive years) based on AYP determinations for 2002-2003 and the immediately preceding school years. Incomplete data for the 2003-2004 school year indicate that the percentage of schools failing to meet AYP for one year may have declined in most states, but the percentage identified for improvement may have increased.

The AYP provisions of the NCLBA are challenging and complex, and have generated substantial interest and debate. Debates regarding the NCLBA provisions on AYP have focused on the provision for an ultimate goal, use of confidence intervals and data averaging, population diversity effects, minimum pupil group size (n), separate focus on specific pupil groups, number of schools identified and state variations therein, the 95% participation rule, state variations in assessments and proficiency standards, and timing. This report will be updated to reflect major new policy developments or available information.

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Adequate Yearly Progress (AYP): Implementation of the No Child Left Behind Act

Background: Title I Outcome Accountability and the AYP Concept

Title I, Part A of the Elementary and Secondary Education Act (ESEA), the largest federal K-12 education program, authorizes financial aid to local educational agencies (LEAs) for the education of disadvantaged children and youth at the preschool, elementary, and secondary levels.

Since the 1988 reauthorization of the ESEA (The Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988, or “School Improvement Act,” P.L. 100-297), the accountability provisions of this program have been increasingly focused on achievement and other outcomes for participating pupils and schools. Since the subsequent ESEA reauthorization in 1994 (the Improving America’s Schools Act of 1994, P.L. 103-382), and particularly under the No Child Left Behind Act of 2001 (NCLBA, P.L. 107-110), a key concept embodied in these outcome accountability requirements is that of “adequate yearly progress (AYP)” for schools, LEAs, and (more recently) states overall. The primary purpose of AYP requirements is to serve as the basis for identifying schools and LEAs where performance is inadequate, so that these inadequacies may be addressed first through provision of increased support and, ultimately, a variety of “corrective actions.”¹

This report is intended to provide an overview of the AYP concept and several related issues, a description of the AYP provisions of the No Child Left Behind Act, and an analysis of the implementation of these provisions by the U.S. Department of Education (ED) and the states. It will be updated when major administrative actions are taken by ED, or substantial new data on state implementation become available.

¹ These corrective actions, as well as possible performance-based awards, are not discussed in detail in this report. For information on them, see CRS Report RL31487, *Education for the Disadvantaged: Overview of ESEA Title I-A Amendments Under the No Child Left Behind Act*, by Wayne Riddle.

General Elements of AYP Provisions

ESEA Title I, Part A has included requirements for participating LEAs and states to administer assessments of academic achievement to participating pupils, and to evaluate LEA programs at least every two years, since the program was initiated in 1965. However, relatively little attention was paid to school- or LEA-wide outcome accountability until adoption of the School Improvement Act of 1988.² Under the School Improvement Act, requirements for states and LEAs to evaluate the performance of Title I-A schools and individual participating pupils were expanded. In addition, LEAs and states were for the first time required to develop and implement improvement plans for pupils and schools whose performance was not improving. However, in comparison to current Title I-A outcome accountability provisions, these requirements were broad and vague. States and LEAs were given little direction as to how they were to determine whether performance was satisfactory, or how performance was to be defined, with one partial exception.

The exception applied to schools conducting schoolwide programs under Title I-A. In schoolwide programs, Title I-A funds may be used to improve instruction for all pupils in the school, rather than being targeted on only the lowest-achieving individual pupils in the school (as under the other major Title I-A service model, targeted assistance schools). Under the 1988 version of the ESEA, schoolwide programs were limited to schools where 75% or more of the pupils were from low-income families (currently this threshold has been reduced to 40%). The School Improvement Act required schoolwide programs, in order to maintain their special authority, to demonstrate that the academic achievement of pupils in the school was higher than either of the following: (a) the average level of achievement for pupils participating in Title I-A in the LEA overall; or (b) the average level of achievement for disadvantaged pupils enrolled in that school during the three years preceding schoolwide program implementation.

The embodiment of outcome accountability in the specific concept of AYP began with the 1994 Improving America's Schools Act (IASA). Under the IASA, states participating in Title I-A were required to develop AYP standards as a basis for systematically determining whether schools and LEAs receiving Title I-A grants were performing at an acceptable level. Failure to meet the state AYP standards was to become the basis for directing technical assistance, and ultimately corrective actions, toward schools and LEAs where performance was consistently unacceptable.

Generic AYP Factors. Before proceeding to a description of the Title I-A AYP provisions under the IASA of 1994, it may be useful to outline the general types of major provisions frequently found in AYP provisions, actual or proposed. These are briefly described below.

Primary Basis: They are based primarily on aggregate measures of academic achievement by pupils. As long as Title I-A has contained AYP provisions, it has

² For additional information on this legislation, see CRS Report 89-7, *Education for Disadvantaged Children: Major Themes in the 1988 Reauthorization of Chapter 1*, by Wayne Riddle (archived, available from author [7-7382] upon request.)

provided that these be based ultimately on *state* standards of curriculum content and pupil performance, and assessments linked to these standards. More specifically, the Title I-A requirements have been focused on the percentage of pupils scoring at the “proficient” or higher level of achievement on state assessments, not a common national standard. However, when AYP provisions were first adopted in 1994, states were given an extended period of time to adopt and implement these standards and assessments, and for a lengthy period after the 1994 amendments, various “transitional” performance standards and assessments were used to measure academic achievement.³

Ultimate Goal: AYP standards may or may not incorporate an ultimate goal, which may be relatively specific and demanding (e.g., all pupils should reach the proficient or higher level of achievement, as defined by each state, in a specified number of years), or more ambiguous and less demanding (e.g., pupil achievement levels must increase in relation to either LEA or state averages or past performance). If there is a specific ultimate goal, there may also be requirements for specific, numerical, annual objectives either for pupils in the aggregate or for each of several pupil groups. The primary purpose of such a goal is to require that levels of achievement continuously increase over time in order to be considered satisfactory.

Subject Areas: With respect to subject areas, AYP standards might focus only on reading and math achievement, or they might include additional subject areas.

Additional Indicators: In addition to pupil scores on assessments, AYP standards often include one or more supplemental indicators, which may or may not be academic. Examples include high school graduation rates, attendance rates, or assessment scores in subjects other than those that are required.

Levels at Which Applied: States may be required to develop AYP standards for, and apply them to, schools, LEAs, and/or for states overall. Further, it may be required that AYP standards be applicable to *all* schools and LEAs, or only to those participating in ESEA Title I-A.

Disaggregation of Pupil Groups: AYP standards might be applied simply to all pupils in a school, LEA, or state, or they might also be applied separately and specifically to a variety of demographic groups of pupils — e.g., economically disadvantaged pupils, pupils with disabilities, pupils in different ethnic or racial groups, or limited English proficient pupils. In a program such as Title I-A, the purpose of which is to improve education for the disadvantaged, it may be especially important to consider selected disadvantaged pupil groups separately, to identify situations where overall pupil achievement may be satisfactory, but the performance of one or more disadvantaged pupil groups is not.

Basic Structure: AYP standards tend to follow either a “*growth*” or a “*status*” model in their basic structure. “Growth” models are based on a comparison of the

³ For additional information on the standard and assessment requirements under ESEA title I-A, see CRS Report RL31407, *Educational Testing: Implementation of ESEA Title I-A Requirements Under the No Child Left Behind Act*, by Wayne C. Riddle.

current performance of pupils in a school/LEA/state to performance in the recent past (or possibly to projected performance based on demographic and other relevant characteristics of the school, LEA, or state). A highly simple AYP requirement of this type would be that aggregate school performance must increase each year to a statistically significant extent. A possible variant of the growth model, often referred to as a *longitudinal* model, would focus on tracking and aggregating the growth in performance of individual students from year to year, rather than simply comparing the performance of all students in a grade, school or LEA with that for similarly situated (but not the same) students in the previous year. “Growth” models emphasize the widely varying current levels of achievement in different schools or LEAs, or among different demographic groups of pupils, and generally give credit for all improvements above those levels.

In contrast, “status” models set a threshold level of performance which must be met by any school or LEA, both overall and with respect to relevant pupil groups, in order to make AYP, whatever the school’s or LEA’s “starting point.” For example, it might be required that 45% or more of the pupils in any of a state’s elementary schools score at the proficient or higher level of achievement in order for a school to make AYP. “Status” models emphasize the importance of meeting certain minimum levels of achievement for all pupil groups, schools, and LEAs, and arguably apply consistent expectations to all.

Alternative or “Safe Harbor” Provisions: AYP systems often have alternative provisions under which schools or LEAs that fail to meet the usual requirements may still be deemed to have made AYP if they meet certain specified alternative conditions. For example, under a status model, it might be generally required that 45% or more of the pupils in any of a state’s elementary schools score at the proficient or higher level of achievement in order for the school to make AYP, but a school where aggregate achievement is below this level might still be deemed to have made AYP, through a “safe harbor” provision, if the percentage of pupils at the proficient or higher level in the school is at least 5 percentage points higher than for the previous year. Such a concept may be seen as adding a partial growth model element to a status model of AYP.

Assessment Participation Rate: It might be required that a specified minimum percentage of a school or LEA’s pupils participate in assessments in order for the school or LEA to be deemed to have met AYP standards. The primary purposes of such a requirement are to assure that assessment results are broadly representative of the achievement level of the school’s pupils, and to minimize the incentives for school staff to discourage test participation by pupils deemed likely to perform poorly on assessments.

Exclusion of Certain Pupils: Beyond general participation rate requirements (see above), states may be specifically required to include, or allowed to exclude, certain groups of pupils in determining whether schools or LEAs meet AYP requirements. For example, statutory provisions might allow the exclusion of pupils who have attended a school for less than one year in determining whether a school meets AYP standards.

Special Provisions for Pupils With Particular Educational Needs: Beyond requirements that all pupils be included in assessments, with accommodations where appropriate, there may be special provisions for limited English proficient (LEP) pupils or pupils with the most significant cognitive disabilities.

Averaging or Other Statistical Manipulation of Data: Finally, there are a variety of ways in which statistical manipulation of AYP-related data or calculations might be either authorized or prohibited. Major possibilities include averaging of test score data over periods of two or more years, rather than use of the latest data in all cases; or the use of “confidence intervals” in calculating whether the aggregate performance of a school’s pupils is at the level specified by the state’s AYP standards. These techniques, and the implications of their use, are discussed further below. In general, their use tends to improve the reliability and validity of AYP determinations, while often reducing the number of schools or LEAs identified as failing to meet AYP standards.

AYP Provisions Under the IASA of 1994

Under the IASA, states were to develop and implement AYP standards soon after enactment. However, states were given several years (generally until the 2000-2001 school year) to develop and implement curriculum content standards, pupil performance standards, and assessments linked to these for at least three grade levels in math and reading.⁴ Thus, during the period between adoption of the IASA in 1994 and of the NCLBA in early 2002, for most states the AYP provisions were based on “transitional” assessments and pupil performance standards that were widely varying in nature. AYP standards based on such “transitional” assessments were considered to be “transitional” themselves, with “final” AYP standards to be based on states’ “final” assessments, when implemented. The subject areas required to be included in state AYP standards (as opposed to required assessments) were not explicitly specified in statute; ED policy guidance required states to include only math and reading achievement in determining AYP. Further, the inclusion in AYP standards of measures other than academic achievement in math and reading on state assessments was optional.

With respect to the ultimate goal of the state AYP standards, the IASA provided broadly that there must be continuous and substantial progress toward a goal of having all pupils meet the proficient and advanced levels of achievement. However, no timeline was specified for reaching this goal, and most states did not incorporate it into their AYP plans in any concrete way.

The IASA’s AYP standards were to be applied to schools and LEAs, but not to the states overall. Further, while states were encouraged to apply the AYP standards to *all* public schools and LEAs, states could choose to apply them only to schools and LEAs participating in Title I-A, and most did so limit their application.

⁴ For more information on all aspects of the ESEA Title I-A assessment requirements, see CRS Report RL31407, *Educational Testing: Implementation of the ESEA Title I-A Requirements Under the No Child Left Behind Act*, by Wayne Riddle.

The IASA provided that all relevant pupils⁵ were to be included in assessments and AYP determinations, although assessments were to include results for pupils who had attended a school for less than one year only in tabulating LEA-wide results (i.e., not for individual schools). LEP pupils were to be assessed in the language that would best reflect their knowledge of subjects other than English; and accommodations were to be provided to pupils with disabilities.

Importantly, while the IASA required state assessments to ultimately (by 2000-2001) provide test results which were disaggregated by pupil demographic groups, it did not require such disaggregation of data in AYP standards and calculations. The 1994 statute provided that state AYP standards must consider all pupils, “particularly” economically disadvantaged and LEP pupils, but did not specify that the AYP definition must be based on each of these pupil groups separately. Finally, the statute was silent with respect to data averaging or other statistical techniques, as well as the basic structure of state AYP standards (i.e., whether a “status” or “growth” model must be employed).

Concerns About The AYP Provisions of the IASA. Thus, the IASA’s provisions for state AYP standards broke new ground conceptually, but were comparatively broad and ambiguous. While states were required to adopt and implement at least “transitional” AYP standards, based on “transitional” state assessment results, soon after enactment of the IASA, they were not required to adopt “final” AYP standards, in conjunction with final assessments and pupil performance standards, until the 2000-2001 school year. Further, states were not allowed to implement most corrective actions, such as reconstituting school staff, until they adopted final assessments, so these provisions were not implemented by most states until the IASA was replaced by the NCLBA.

A compilation was prepared by the Consortium for Policy Research in Education (CPRE) of the “transitional” AYP standards which states were applying in administering their Title I-A programs during the 1999-2000 school year.⁶ Overall, according to this compilation, the state AYP definitions for 1999-2000 were widely varied and frequently complex. General patterns in these AYP standards, outlined below, reflect state interpretation of the IASA’s statutory requirements.

- Most considered only achievement test scores, but some considered a variety of additional factors, most often dropout rates or attendance rates.
- Often, the state AYP standards set a threshold of some minimum percentage, or minimum rate of increase in the percentage, of pupils at the proficient or higher level of achievement on a composite of state tests. These thresholds were often based, at least in part, on performance of pupils in a school or LEA *relative to* statewide averages or to the school’s or LEA’s performance in the previous

⁵ All pupils in states where AYP determinations were made for all public schools, or all pupils served by ESEA Title I-A in states where AYP determinations were made only for such schools and pupils.

⁶ See [http://www.cpre.org/Publications/Publications_Accountability.htm].

year. Several states identified schools as failing to make AYP if they fail to meet “expected growth” in performance based on factors such as initial achievement levels and statewide average achievement trends. These thresholds almost never incorporated a “ladder” of movement toward an ultimate goal of all pupils at the proficient level, or otherwise explicitly incorporated an ultimate goal to be met by some specific date.

- While some state AYP standards were based on achievement results for a single year, they were frequently based on two- or three-year rolling averages.
- The AYP standards generally referred only to all pupils in a school or LEA combined, without a specific focus on any pupil demographic groups. However, the AYP standards of some states included a focus specifically on a single category of low-achieving pupils separately from all pupils, and a very few (e.g., Texas) included a specific focus on the performance of several pupil groups (African American, Hispanic, White, or Economically Disadvantaged). One state (New Mexico) compared school scores to predicted scores based on such factors as pupil demographics.
- The state AYP standards under the IASA were sometimes substantially adjusted from year-to-year (often with consequent wide variations in the percentage of Title I-A schools identified as needing improvement). According to CPRE, two states (Iowa and New Hampshire) left AYP standards and determinations almost totally to individual LEAs in 1999-2000.

There was tremendous variation among the states in the impact of their AYP policies under the IASA on the number and percentage of Title I-A schools and LEAs that were identified as failing to meet the AYP standards. In some states, a substantial majority of Title I-A schools were identified as failing to make AYP, while in others almost no schools were so identified. In July 2002, just before the initial implementation of the new AYP provisions of the NCLBA, ED released a compilation of the number of schools identified as failing to meet AYP standards *for two or more consecutive years* (and therefore identified as being in need of improvement) in 2001-2002 (for most states) or 2000-2001 (in states where 2001-2002 data were not available).⁷ The national total number of these schools was 8,652; the number in individual states ranged from zero in Arkansas and Wyoming to 1,513 in Michigan and 1,009 in California. While there are obvious differences in the size of these states, there were also wide variations in the percentage of all schools participating in Title I-A that failed to meet AYP for either one year or two or more consecutive years.

⁷ See the U.S. Department of Education, “Paige Releases Number of Schools in School Improvement in Each State,” press release, July 1, 2002 at [<http://www.ed.gov/news/pressreleases/2002/07/07012002a.html>].

AYP Under the NCLBA Statute

The NCLBA provisions regarding AYP may be seen as an evolution of, and to a substantial degree as a reaction to perceived weaknesses in, the AYP requirements of the 1994 IASA. The latter were frequently criticized as being insufficiently specific, detailed, or challenging. Criticism often focused specifically on their failure to focus on specific disadvantaged pupil groups, failure to require continuous improvement toward an ultimate goal, and their required applicability only to schools and LEAs participating in Title I-A, not to all public schools or to states overall.

Under the NCLBA, the Title I-A requirements for state-developed standards of AYP were substantially expanded in scope and specificity. As under the IASA, AYP is defined primarily on the basis of aggregate scores of pupils on state assessments of academic achievement. However, under the NCLBA, state AYP standards must also include at least one additional academic indicator, which in the case of high schools must be the graduation rate. The additional indicators may not be employed in a way that would reduce the number of schools or LEAs identified as failing to meet AYP standards.⁸

One of the most important differences between AYP standards under the NCLBA and previous requirements is that under the NCLBA, AYP calculations must be *disaggregated* — i.e., they must be determined separately and specifically for not only all pupils but also for several demographic groups of pupils within each school, LEA, and state. Test scores for an individual pupil may be taken into consideration multiple times, depending on the number of designated groups of which they are a member (e.g., a pupil might be considered as part of the LEP and economically disadvantaged groups, as well as the “all pupils” group). The specified demographic groups are:

- economically disadvantaged pupils,
- LEP pupils,
- pupils with disabilities, and
- pupils in major racial and ethnic groups, as well as all pupils.

However, as is discussed further below, there are three major constraints on the consideration of these pupil groups in AYP calculations. First, pupil groups need not be considered in cases where their number is so relatively small that achievement results would not be statistically significant or the identity of individual pupils might

⁸ Four bills introduced in the 108th Congress (H.R. 3049, H.R. 4434, H.R. 4464, and S. 2345) would specifically authorize states to include measures of *growth* in pupil achievement, on either an individual or cohort basis, as the additional indicator in state AYP standards. Further, three of these bills (all except H.R. 3049) would allow states to use improvement on this additional indicator as a justification for reducing the number of schools identified as failing to meet AYP. In effect, this proposal may be seen as authorizing states to employ a growth-based model of AYP determination as an alternative to the status-based model now embodied in the NCLBA.

be divulged.⁹ As is discussed further below, the selection of the minimum number (n) of pupils in a group for the group to be considered in AYP determinations has been left largely to state discretion. State policies regarding “n” have varied widely, with important implications for the number of pupil groups actually considered in making AYP determinations for many schools and LEAs, and the number of schools or LEAs potentially identified as failing to make AYP. Second, it has been left to the states to define the “major racial and ethnic groups” on the basis of which AYP must be calculated. And third, as under the IASA, pupils who have not attended the same school for a full year need not be considered in determining AYP for the school, although they are still to be included in LEA and state AYP determinations.

In contrast to the previous statute, under which AYP standards had to be applied only to pupils, schools, and LEAs participating in Title I-A, AYP standards under the NCLBA must be applied to *all* public schools, LEAs, and for the first time to states overall, if a state chooses to receive Title I-A grants. However, corrective actions for failing to meet AYP standards need only be applied to schools and LEAs participating in Title I-A.

Another major break with the past is that state AYP standards must now incorporate concrete movement toward meeting an *ultimate goal* of all pupils reaching a proficient or advanced level of achievement within 12 years (the 2013-2014 school year). The steps — i.e., required levels of achievement — toward meeting this goal must increase in “equal increments” over time. However, as is discussed further below, several states have accommodated this requirement in ways that require much more rapid progress in the later years of the period leading up to 2013-2014 than in the earlier period.

The basic structure for AYP under the NCLBA is now specified as a “status” model. A “uniform bar” approach is employed: states are to set a threshold percentage of pupils at proficient or advanced levels each year that is applicable to all pupil subgroups of sufficient size to be considered in AYP determinations.¹⁰ The threshold levels of achievement are to be set separately for reading and math, and may be set separately for each level of K-12 education (elementary, middle, and high schools). The minimum¹¹ *starting point* for the “uniform bar” in the initial period is to be the *greater* of: (a) the percentage of pupils at the proficient or advanced level of achievement for the lowest-achieving pupil group in the base year,¹² *or* (b) the percentage of pupils at the proficient or advanced level of achievement for the lowest-performing quintile (fifth)¹³ of schools statewide in the base year.¹⁴ The

⁹ In addition, program regulations (*Federal Register*, Dec. 2, 2002) do not require graduation rates and other additional academic indicators to be disaggregated in determining whether schools or LEAs meet AYP standards.

¹⁰ A bill introduced in the 108th Congress, H.R. 3049, would allow states to set separate starting points for each relevant pupil group.

¹¹ States may, of course, establish starting points above the required level.

¹² The “base year” is the 2001-2002 school year.

¹³ This is determined by ranking all public schools (of the relevant grade level) statewide (continued...)

“uniform bar” must generally be increased at least once every three years, although in the initial period it must be increased after no more than two years.

In determining whether scores for a group of pupils are at the required level, the averaging of scores over two to three years is allowed. In addition, the NCLBA includes a *safe harbor* provision, under which a school that does not meet the standard AYP requirements may still be deemed to meet AYP if it experiences a 10% (not a 10 percentage point) reduction in the gap between 100% and the base year for the specific pupil groups that fail to meet the “uniform bar,” and those pupil groups make progress on at least one other academic indicator included in the state’s AYP standards.

Finally, the NCLBA AYP provisions include an assessment *participation rate* requirement. In order for a school to meet AYP standards, at least 95% of all pupils, as well as at least 95% of each of the demographic groups of pupils considered for AYP determinations for the school or LEA, must participate in the assessments that serve as the primary basis for AYP determinations.¹⁵

ED Regulations and Guidance on Implementation of the AYP Provisions of the NCLBA

States were to begin determining AYP for schools, LEAs, and the states overall based on the NCLBA provisions beginning with the 2002-2003 school year. The deadline for states to submit to ED their AYP standards based on the NCLBA provisions was January 31, 2003, and according to ED, all states met this deadline. On June 10, 2003, ED announced that accountability plans had been approved for all states. However, many of the approved plans required states to take additional actions following submission of their plan.¹⁶

In the period preceding ED’s review of state accountability plans under the NCLBA, the Department published two relevant documents. Regulations, published in the *Federal Register* on December 2, 2002, mirrored the detailed provisions in the authorizing statute. The second document, a policy letter published by the Secretary

¹³ (...continued)

according to their percentage of pupils at the proficient or higher level of achievement (based on all pupils in each school), and setting the threshold at the point where one-fifth of the schools (weighted by enrollment) have been counted, starting with the schools at the lowest level of achievement.

¹⁴ Under program regulations (34 CFR 200.16(c)(2)), the starting point may vary by grade span (e.g., elementary, middle, etc.) and subject.

¹⁵ If the number of pupils in a specified demographic group is too small to meet the minimum group size requirements for consideration in AYP determinations, then the participation rate requirement does not apply.

¹⁶ The plans have been posted by ED at [<http://www.ed.gov/admins/lead/account/stateplans03/index.html>].

of Education on July 24, 2002,¹⁷ emphasized flexibility, stating that “The purpose of the statute, for both assessments and accountability, is to build on high quality accountability systems that States already have in place, not to require every state to start from scratch.” The letter went on to list 10 criteria which it said would be applied by ED in the process of reviewing state AYP standards. These criteria included most, but not all, of the specifications regarding AYP from the authorizing statute and regulations (e.g., applicability to all public schools and their pupils, and specific focus on individual pupil groups). In response to concerns that large numbers of schools might be identified as failing to make AYP (as is discussed further below), ED officials emphasized the importance of taking action to identify and move to improve underperforming schools, no matter how numerous. They also emphasized the possibilities for flexibility and variation in taking corrective actions with respect to schools which fail to meet AYP, depending on the extent to which they fail to meet those standards.

Aspects of state AYP plans that apparently received special attention in ED’s reviews included (a) the pace at which proficiency levels are expected to improve (e.g., equal increments of improvement over the entire period, or much more rapid improvement expected in later years than at the beginning); (b) whether schools or LEAs must fail to meet AYP with respect to the *same* pupil group(s), grade level(s) and/or subject areas to be identified as needing improvement, or whether two consecutive years of failure to meet AYP with respect to *any* of these categories should lead to identification;¹⁸ (c) the length of time over which pupils should be identified as being LEP; (d) the minimum size of pupil groups in a school in order for the group to be considered in AYP determinations or for reporting of scores; (e) whether to allow schools credit for raising pupil scores from below basic to basic (as well as from basic or below to proficient or above) in making AYP determinations; and (f) whether to allow use of statistical techniques such as “confidence intervals” (i.e., whether scores are below the required level to a statistically significant extent) in AYP determinations.

Recent Developments. In late 2003 and thus far in 2004, ED officials have published additional regulations and other policy guidance on selected aspects of AYP determination and related assessment issues, in an effort to provide additional flexibility. This guidance addresses some aspects of AYP implementation that have created particular difficulties for many schools and LEAs: assessment participation rates, calculation of AYP with respect to LEP pupils and pupils with disabilities, plus options for determining AYP in targeted assistance Title I-A programs. While these new forms of flexibility may clearly be employed in making future AYP

¹⁷ See [<http://www.ed.gov/news/pressreleases/2002/07/07242002.html>].

¹⁸ ED has approved state accountability plans under which schools or LEAs would be identified as failing to meet AYP only if they failed to meet the required level of performance in the same subject for two or more consecutive years, but has apparently not approved proposals under which a school would be identified only if it failed to meet AYP in the same subject *and* pupil group for two or more consecutive years. A bill has been introduced in the 108th Congress, H.R. 3049, that would allow states to identify schools as failing to meet AYP standards only if they failed for two or more consecutive years with respect to the same pupil group and subject area.

determinations, it is ED's position that they may not be applied retroactively to AYP determinations for 2002-2003 and preceding years.¹⁹

Participation Rates. In the most recent of these developments, on March 29, 2004, ED announced that schools could meet the requirement that 95% or more of pupils (all pupils as well as pupils in each designated demographic group) participate in assessments (in order for the school or LEA to make AYP) on the basis of *average* participation rates for the last two or three years, rather than having to post a 95% or higher participation rate *each* year. In other words, if a particular demographic group of pupils in a public school has a 93% test participation rate in the most recent year, but had a 97% rate the preceding year, the 95% participation rate requirement would be met. In addition, the new guidance would allow schools to exclude pupils who fail to participate in assessments due to a "significant medical emergency" from the participation rate calculations. The new guidance further emphasizes the authority for states to allow pupils who miss a primary assessment date to take make-up tests, and to establish a minimum size for demographic groups of pupils to be considered in making AYP determinations (including those related to participation rates). According to ED, in some states, as many as 20% of the schools failing to make AYP did so on the basis of assessment participation rates alone. It is not known how many of these schools would meet the new, somewhat more relaxed standard.

LEP Pupils. In a letter dated February 19, and proposed regulations published on June 24, 2004, ED officials announced two new policies with respect to LEP pupils.²⁰ First, with respect to assessments, LEP pupils who have attended schools in the United States (other than Puerto Rico) for less than 10 months must participate in English language proficiency and mathematics tests. However, the participation of such pupils in reading tests (in English), as well as the inclusion of any of these pupils' test scores in AYP calculations, is to be optional (i.e., schools and LEAs need not consider the scores of first year LEP pupils in determining whether schools or LEAs meet AYP standards). Such pupils are still considered in determining whether the 95% test participation has been met.

Second, in AYP determinations, schools and LEAs may continue to include pupils in the LEP demographic category for up to two years after they have attained proficiency in English. However, these formerly LEP pupils need not be included when determining whether a school or LEA's count of LEP pupils meets the state's minimum size threshold for inclusion of the group in AYP calculations, and scores of formerly LEP pupils may not be included in state, LEA, or school report cards. Both these options, if exercised, should increase average test scores for pupils categorized as being part of the LEP group, and reduce the extent to which schools or LEAs fail to meet AYP on the basis of LEP pupil groups.²¹

¹⁹ This topic is discussed in greater detail in the last section of this report.

²⁰ See *Federal Register*, June 24, 2004, pp. 35462-35465; and [<http://www.ed.gov/nclb/accountability/schools/factsheet-english.html>].

²¹ A bill introduced in the 108th Congress, H.R. 3049, would authorize the exclusion of scores of LEP pupils who have resided in the United States for less than *three* years, and would allow formerly LEP pupils to be included in that group for AYP calculation purposes indefinitely.

Pupils With Disabilities. Additional regulations, addressing the application of the Title I-A standards and assessment requirements to certain pupils with disabilities, were published in the *Federal Register* on December 9, 2003 (pp. 68698-68708). The purpose of these regulations is to clarify the application of standard, assessment, and accountability provisions to pupils “with the most significant cognitive disabilities.” Under the regulations, states and LEAs may adopt alternative assessments *based on alternative achievement standards* — aligned with the state’s academic content standards and reflecting “professional judgment of the highest achievement standards possible” — for a limited percentage of pupils with disabilities.²² When making AYP determinations, in general no more than 1.0% of all pupils (approximately 9% of all pupils with disabilities) counted as having achievement levels of proficient or above may consist of pupils taking such alternative assessments based on alternative achievement standards at the state and LEA level; there is no such limitation for individual schools. SEAs may request from the U.S. Secretary of Education an exception allowing them to exceed the 1.0% cap statewide, and SEAs may grant such exceptions to LEAs within their state. In the absence of a waiver, the number of pupils scoring at the proficient or higher level on alternative assessments, based on alternative achievement standards, in excess of the 1% limit is to be added to those scoring below proficient in LEA or state level AYP determinations.

AYP Determinations for Targeted Assistance Schools. ED has released a February 4, 2004, letter to a state superintendent of education providing more flexibility in AYP determinations for targeted assistance schools.²³ Title I-A services are provided at the school level via one of two basic models: targeted assistance schools, where services are focused on individual pupils with the lowest levels of academic achievement, or schoolwide programs, in which Title I-A funds may be used to improve academic instruction for all pupils. Currently, most Title I-A programs are in targeted assistance schools, although the number of schoolwide programs has grown rapidly in recent years, and most pupils served by Title I-A are in schoolwide programs.

This policy letter gives schools and LEAs the option of considering only pupils assisted by Title I-A for purposes of making AYP determinations for individual schools. LEA and state level AYP determinations would still have to be made on the basis of all public school pupils. The impact of this authority, if utilized, is unclear. In schools using this authority, there would be an increased likelihood that pupil demographic groups would be below minimum size to be considered. At the same time, if Title I-A participants are indeed the lowest-performing pupils in targeted assistance schools, it seems unlikely that many schools would choose to base AYP determinations only on those pupils, especially given the structure of AYP requirements under the NCLBA (i.e., a status model, not a growth model).

²² This limitation does *not* apply to the administration of alternative assessments *based on the same standards applicable to all students*, for other pupils with (non-cognitive or less severe cognitive) disabilities.

²³ See [<http://www.ed.gov/policy/elsec/guid/stateletters/asaypnc.html>].

Data on Schools Identified as Failing to Meet AYP

Beginning in the summer of 2003, a substantial amount of data has become available on the number of schools and LEAs that failed to meet the new AYP standards as provided under the NCLBA for the 2002-2003 and 2003-2004 school years, the first two years of full implementation of the NCLBA provisions. A basic problem with almost all such reported data thus far is that they have generally been incomplete (i.e., not all states are included) and subject to change (i.e., the data for several states have been revised one or more times after being initially published, due largely to data corrections and appeals).²⁴ As a result, all reports on the number of schools failing to meet AYP standards under the NCLBA provisions remain *tentative and incomplete*, and no such data have yet been published by ED.

A compilation of state counts of schools failing to meet AYP in 2002-2003 was published in a January 2004 report by the Center on Education Policy (CEP).²⁵ According to this report, the overall percentage of all public schools identified as failing to make AYP based on test scores in 2002-2003, based on data for 47 states plus the District of Columbia, was approximately 31% of *all* public schools.²⁶ The percentage for individual states varied from 5% (Alabama and Wisconsin) to 76% (Florida).

More recently, a compilation of AYP results for a majority of states for the 2002-2003 and 2003-2004 school years was published in December 2004 by *Education Week*.²⁷ While national aggregate comparisons are not possible, due to the number of states for which data are missing for one or both years, these data continue to reflect a pattern of wide variation among states in the percentage of public schools failing to meet AYP standards. Among states providing results, the percentage of public schools failing to meet AYP standards in the 2003-2004 school year ranged from 4% (Wisconsin) to 77% (both Alabama and Florida). For the 36 states where such a comparison is possible, based on these data, the percentage of public schools failing to make AYP increased between 2002-2003 and 2003-2004 in only 5 states, remained the same in 1 state, and declined in the remaining 30 states. In some cases, the decline was substantial (e.g., 44% in 2002-2003 to 14% in 2003-2004 for Tennessee).

It should be emphasized that many of the schools reported as having failed to meet AYP standards for 2002-2003 or 2003-2004 have failed to meet AYP for one year only; the NCLBA requires that a series of actions be taken only with respect to schools or LEAs participating in ESEA Title I-A that fail to meet AYP for two or

²⁴ See also "Data Doubts Plague States, Federal Law," *Education Week*, Jan. 7, 2004.

²⁵ Center on Education Policy, *From the Capital to the Classroom: Year 2 of the No Child Left Behind Act*, pp. 56-57.

²⁶ Note that the table in the report shows this as 28%, but that seems to result from dividing the number of schools identified as failing to make AYP in 47 states plus D.C. by the *total* number of public schools in 50 states plus D.C.

²⁷ See "Taking Root," *Education Week*, Dec. 8, 2004, p. 1.

more consecutive years. Data reported by states to ED on *the number of schools identified as needing improvement* based on data for 2002-2003 and preceding years has been compiled and reported in the non-governmental *Title I Monitor*. According to this publication,²⁸ 6,079 Title I-A participating schools were in the “needs improvement” status — i.e., they had failed to meet AYP standards for two or more consecutive years — based on AYP determinations for 2002-2003 and the immediately preceding school years. These constituted 11.9% of all public schools receiving Title I-A grants in 2002-2003. Included among these schools were 2,712 schools that had failed to meet AYP standards for two consecutive years, 1,593 that had failed to do so for three consecutive years, 1,012 schools that had failed to meet AYP standards for four consecutive years, and 742 schools that failed to do so for five or more consecutive years. Again, the number of schools, and percentage of all Title I-A participating schools, that were identified as needing improvement varied widely among the states. For example, Wyoming reported that no schools were identified, and eight other states, some of them large (e.g., Texas) reported fewer than 10 (and fewer than 3% of all) schools. In contrast, seven states reported 250 or more of their Title I-A schools had been identified as needing improvement, and the percentage of all Title I-A schools so identified was as high as 49.3% (for Georgia).

Less complete, but more current, data on schools identified for improvement in 2003-2004 was included in the *Education Week* survey noted above. Unlike the percentage of schools failing to meet AYP standards (for *one* or more years), that declined in most reporting states between 2002-2003 and 2003-2004, the percentage of public schools identified for school improvement (failing to meet AYP for *two* or more consecutive years) increased in a large majority of the reporting states (33 out of 41 states). In some cases, the increase was dramatic — e.g., from 1% to 15% in New Hampshire, or from 1% to 28% in Oregon.

It should be noted these AYP determinations for 2002-2003 were made before ED announced the additional forms of flexibility discussed below (regarding participation rates, LEP pupils and pupils with disabilities, or targeted assistance schools). The aggregate percentage of public schools identified as failing to make AYP might have been significantly lower for 2002-2003 if these policy options had been implemented in every state. Apparent reductions in the percentage of public schools failing to make AYP in many states (cited above) may reflect this increased flexibility.

Issues in State Implementation of the NCLBA Provisions

Introduction

The primary challenge associated with the AYP concept is to develop and implement school, LEA, and state performance measures that are: (a) challenging,

²⁸ See “NCLB’s First Year Saw 1 in 9 Schools in Improvement, States Reveal,” *Title I Monitor*, July 2004, p. 1.

(b) provide meaningful incentives to work toward continuous improvement, (c) are at least minimally consistent across LEAs and states, and (d) focus attention especially on disadvantaged pupil groups. At the same time, it is generally deemed desirable that AYP standards should allow flexibility to accommodate myriad variations in state and local conditions, demographics, and policies, and avoid the identification of so many schools and LEAs as failing to meet the standards that morale declines significantly systemwide and it becomes extremely difficult to target technical assistance and corrective actions on low-performing schools. The AYP provisions of the NCLBA are challenging and complex, and have generated substantial criticism from several states, LEAs, and interest groups. Many critics are especially concerned that efforts to direct resources and apply corrective actions to low-performing schools would likely be ineffective if resources and attention are dispersed among a relatively large proportion of public schools. Others defend the NCLBA's requirements as being a measured response to the weaknesses of the pre-NCLBA AYP provisions, which were much more flexible but, as discussed above, had several weaknesses.

The remainder of this report provides a discussion and analysis of several specific aspects of the NCLBA's AYP provisions that have attracted significant attention and debate. These include the provision for an ultimate goal, use of confidence intervals and data averaging, population diversity effects, minimum pupil group size (n), separate focus on specific pupil groups, number of schools identified and state variations therein, the 95% participation rule, state variations in assessments and proficiency standards, and timing.

It should be noted that this report focuses on issues that have arisen in the implementation of the NCLBA provisions on AYP. As such, it generally does not focus on *alternatives* to the current statutory provisions of the NCLBA (for example, a greater reliance on growth, rather than status, based models of AYP).

Ultimate Goal

The required incorporation of an ultimate goal — of all pupils at a proficient or higher level of achievement within 12 years of enactment — is one of the most significant differences between the AYP provisions of the NCLBA and those under previous legislation. Setting such a date is perhaps the primary mechanism requiring state AYP standards to incorporate annual increases in expected achievement levels, as opposed to the relatively static expectations embodied in most state AYP standards under the previous IASA. Without an ultimate goal of having all pupils reach the proficient level of achievement by a specific date, states might simply establish relative goals (e.g., performance must be as high as the state average) that provide no real movement toward, or incentives for, significant improvement, especially among disadvantaged pupil groups.

Nevertheless, a goal of having all pupils at a proficient or higher level of achievement, within 12 years or any other specified period of time, may be easily criticized as being “unrealistic,” if one assumes that “proficiency” has been established at a challenging level. Proponents of such a demanding ultimate goal argue that schools and LEAs frequently meet the goals established for them, even rather challenging goals, *if* the goals are very clearly identified, defined, and

established, if they are attainable, and if it is made visibly clear that they will be expected to meet them. This is in contrast to a pre-NCLBA system under which performance goals were often vague, undemanding, and poorly communicated, with few, if any, consequences for failing to meet them. A demanding goal might maximize efforts toward improvement by state public school systems, *even if* the goal is not met. Further, if a less ambitious goal were to be adopted, what lower level of pupil performance might be acceptable, and for which pupils?

At the same time, by setting deadlines by which all pupils must achieve at the proficient or higher level, the AYP provisions of the NCLBA create an incentive for states to weaken their pupil performance standards to make them easier to meet. In many states, only a minority of pupils (sometimes a small minority) are currently achieving at the proficient or higher level on state reading and mathematics assessments. For example, in California the percentage of *all* pupils scoring at the proficient or higher level of achievement ranged from 30% to 39% in grades 2-11 in reading, and from 30% to 53% in grades 2-7 in mathematics for 2003. Even in states where the percentage of all pupils scoring at the proficient or higher level is substantially higher, the percentage of those in many of the pupil groups identified under the NCLBA's AYP provisions is substantially lower.²⁹ It would be extremely difficult for such states to reach a goal of 100% of their pupils at the proficient level, even within 10-12 years, without reducing their performance standards.

There has thus far been some apparent movement toward lowering proficiency standards in a small number of states. Reportedly, a few states have redesignated lower standards (e.g., "basic" or "partially proficient") as constituting a "proficient" level of performance for Title I-A purposes, or established new "proficient" levels of performance which are below levels previously understood to constitute that level of performance, and other states have considered such actions.³⁰ For example, in submitting its accountability plan (which was approved by ED), Colorado stated that it would deem students performing at both its "proficient" and "partially proficient" levels, as defined by that state, as being "proficient" for NCLBA purposes.³¹ In its submission, the state argued that "Colorado's standards for all students remain high in comparison to most states. Colorado's basic proficiency level on CSAP is also high in comparison to most states." Similarly, Louisiana decided to identify its "basic" level of achievement as the "proficient" level for NCLBA purposes, stating that "[T]hese standards have been shown to be high; for example, equipercentile equating of the standards has shown that Louisiana's 'Basic' is somewhat more rigorous than NAEP's 'Basic.' In addition, representatives from Louisiana's business

²⁹ For example, while 65%-74% of *all* pupils scored at the proficient or higher level on reading and math tests administered to pupils in Indiana in grades 3, 6, and 8, in September 2003, the percentage of Indiana pupils with disabilities who scored at the proficient or higher level on these tests ranged from 20% to 47%.

³⁰ See, for example, "States Revise the Meaning of 'Proficient'," *Education Week*, Oct. 9, 2002.

³¹ See [<http://www.ed.gov/admins/lead/account/stateplans03/cocsa.pdf>], p. 7.

community and higher education have validated the use of ‘Basic’ as the state’s proficiency goal.”³²

This is an aspect of the NCLBA’s AYP provisions on which there will likely be continuing debate and, possibly, future adjustments. It is unlikely that any state, or even any school or LEA of substantial size and a heterogeneous pupil population, will meet the NCLBA’s ultimate AYP goal, unless state standards of proficient performance are significantly lowered and/or states aggressively pursue the use of such statistical techniques as setting high minimum group sizes and confidence intervals (described below) to substantially reduce the range of pupil groups considered in AYP determinations and/or effectively lower required achievement level thresholds.

Some states have addressed this situation, at least in the short run, by “backloading” their AYP standards, requiring much more rapid improvements in performance at the end of the 12-year period than at the beginning. These states have followed the letter of the statutory language that requires increases of “equal increments” in levels of performance after the first two years, and at least once every three years thereafter.³³ However, they have “backloaded” this process by, for example, requiring increases only once *every two-three years* at the beginning, then requiring increases of the same degree *every year* for the final years of the period leading up to 2013-2014. For example, both Indiana and Ohio established incremental increases in the threshold level of performance for schools and LEAs that are equal in size, and that are to take effect in the school years beginning in 2004, 2007, 2010, 2011, 2012, and 2013. As a result, the required increases *per year* are three times as great during 2010-2013 than in the 2004-2009 period. These states may be trying to postpone required increases in performance levels until the NCLBA provisions are reconsidered, and possibly revised, by a future Congress.

Confidence Intervals and Data Averaging

Many states have used one or both of a pair of statistical techniques to attempt to improve the validity and reliability of AYP determinations. Use of these techniques also tends to have an effect, whether intentional or not, of reducing the number of schools or LEAs identified as failing to meet AYP standards.

The averaging of test score results for various pupil groups over two- or three-year periods is explicitly authorized under the NCLBA, and this authority is used by many states. In some cases, schools or LEAs are allowed to select whether to average test score data, and for what period (two years or three), whichever is most favorable for them. As was discussed above, recent policy guidance also explicitly allows the

³² See [<http://www.ed.gov/admins/lead/account/stateplans03/lacsa.doc>], p 10.

³³ According to Section 1111(b)(2)(H), “Each State shall establish intermediate goals for meeting the requirements, ..., of this paragraph and that shall — (i) increase in equal increments over the period covered by the State’s timeline” The program regulations also would seem to require increases in equal increments: “Each State must establish intermediate goals that increase in equal increments over the period covered by the timeline....” (34 CFR 200.17).

use of averaging for participation rates. A bill introduced in the 108th Congress, H.R. 3049, would authorize expanded forms of data averaging by states in AYP calculations.

The use of another statistical technique was not explicitly envisioned in the drafting of the NCLBA's AYP provisions, but its inclusion in the accountability plans of several states has been approved by ED. This is the use of "confidence intervals," usually with respect to test scores, but in a couple of states also to the determination of minimum group size (see below). This concept is based on the assumption that any test administration represents a "sample survey" of pupils' educational achievement level. As with all sample surveys, there is a degree of uncertainty regarding how well the sample results — average test scores for the pupil group — reflect pupils' actual level of achievement. As with surveys, the larger the number of pupils in the group being tested, the greater the probability that the group's average test score will represent their true level of achievement, all else being equal. Put another way, confidence intervals are used to evaluate whether achievement scores are below the required threshold *to a statistically significant extent*.

"Confidence intervals" may be seen as "windows" surrounding a threshold test score level (i.e., the percentage of pupils at the proficient or higher level required under the state's AYP standards).³⁴ The size of the window varies with respect to the number of pupils in the relevant group who are tested, and with the desired degree of probability that the group's average score represents their true level of achievement. This is analogous to the "margin of error" commonly reported along with opinion polls. While test results are not based on a small sample of the relevant population, as are opinion poll results, since the tests are to be administered to the full "universe" of pupils, the results from any particular test administration are considered to be only estimates of pupils' true level of achievement, and thus the "margin of error" or "confidence interval" concepts are deemed relevant to all test scores. The probability, or level of confidence, is typically set at 95%, but in some cases may be 99% — i.e., it is 95% (or 99%) certain that the true achievement level for a group of pupils is within the relevant confidence interval of test scores above and below the average score for the group. All other relevant factors being equal, the smaller the pupil group, and the higher the desired degree of probability, the larger is the window surrounding the threshold percentage.

For example, consider a situation where the threshold percentage of pupils at the proficient or higher level of achievement in reading for elementary schools required under a state's AYP standards is 40%. Without applying confidence intervals, a school would simply fail to make AYP if the average scores of all of its pupils, or of any of its relevant pupil groups meeting minimum size thresholds, is below 40%. In contrast, if confidence intervals are applied, windows are established above and below the 40% threshold, turning the threshold from a single point to a variable range of scores. The size of this score range or window will vary depending on the size of the pupil group whose average scores are being considered, and the desired degree

³⁴ Alternatively, the confidence interval "window" may be applied to average test scores for each relevant pupil group, that would be compared to a fixed threshold score level to determine whether AYP has been met.

of probability (95% or 99%) that the average achievements levels for pupils in each group are being correctly categorized as being “truly” below the required threshold. In this case, a school would fail to make AYP with respect to a pupil group only if the average score for the group is below the lowest score in that range.

The use of confidence intervals to determine whether group test scores fall below required thresholds to a statistically significant degree improves the validity of AYP determinations, and addresses the fact that test scores for any group of pupils will vary from one test administration to another, and these variations may be especially large for a relatively small group of pupils. At the same time, the use of confidence intervals reduces the likelihood that schools or (to a lesser extent) LEAs will be identified as failing to make AYP. Also, for relatively small pupil groups and high levels of desired accuracy (especially a 99% probability), the size of confidence intervals may be rather large. Ultimately, the use of this technique may mean that the average achievement levels of pupil groups in many schools will be well below 100% proficiency by 2013-2014, yet the schools would still meet AYP standards because the groups scores are within the relevant confidence interval.

Population Diversity Effects

Minimum Pupil Group Size (n). Another important technical factor in state AYP standards is the establishment of the minimum size (n) for pupil groups to be considered in AYP calculations. The NCLBA recognizes that in the disaggregation of pupil data for schools and LEAs, there might be pupil groups that are so small that average test scores would not be statistically reliable, or the dissemination of average scores for the group might risk violation of pupils’ privacy rights.

Both the statute and ED regulations and other policy guidance have left the selection of this minimum number to state discretion. While most states have reportedly selected a minimum group size between 30 and 50 pupils, the range of selected values for “n” is rather large, varying from as few as five to as many as 200 pupils³⁵ under certain circumstances. Two sparsely populated states (Montana and North Dakota) set no specific level for “n”, relying only on the use of confidence intervals (see above) to establish reliability of test results. While most states have set a standard minimum size for all pupil groups, some states have established higher levels of “n” for pupils with disabilities.³⁶

In general, the higher the minimum group size, the less likely that many pupil groups will actually be separately considered in AYP determinations. (Pupils will still be considered, but only as part of the “all pupils” group, or possibly other specified groups.) This gives schools and LEAs fewer thresholds to meet, and

³⁵ In Texas, the minimum group size for pupil groups (other than the “all pupils” group) is 50 if that group constitutes at least 10% of the pupils in a school or LEA, and up to 200 if below 10% of the enrollment. In California, the minimum group size is 100 in general, although it is 50 if such students constitute 15% or more of enrollment.

³⁶ A higher minimum group size for pupils with disabilities is allowed under current ED policy guidance, and would be explicitly authorized a bill introduced in the 108th Congress, H.R. 3049.

reduces the likelihood that they will be found to have failed to meet AYP standards. At the same time, relatively high levels for “n” weaken the NCLBA’s specific focus on a variety of pupil groups, many of them disadvantaged, such as LEP pupils, pupils with disabilities, or economically disadvantaged pupils.

Separate Focus on Specific Pupil Groups. There are several ongoing issues regarding the NCLBA’s requirement for disaggregation of pupil achievement results in AYP standards — i.e., the requirement that a variety of pupil groups be separately considered in AYP calculations. The first of these was discussed immediately above — the establishment of minimum group size, with the possible result that relatively small pupil groups will not be considered in the schools and LEAs of states that set “n” at a comparatively high level, especially in states that set a higher level for certain groups (e.g., pupils with disabilities) than others.

A second issue arises from the fact that the definition of the specified pupil groups has been left essentially to state discretion. This is noteworthy particularly with respect to two groups of pupils — LEP pupils and pupils in major racial and ethnic groups. Regarding LEP pupils, many have been concerned about the difficulty of demonstrating that these pupils are performing at a proficient level if this pupil group is defined narrowly to include only pupils unable to perform in regular English-language classroom settings. In other words, if pupils who no longer need special language services are no longer identified as being LEP, how will it be possible to bring those who are identified as LEP up to a proficient level of achievement?

In developing their AYP standards, some states addressed this concern by including pupils in the LEP category for one or more years after they no longer need special language services. As was discussed above, ED has recently published policy guidance encouraging all states to follow this approach, allowing them to continue to include pupils in the LEP group for up to two years after being mainstreamed into regular English language instruction, and further allowing the scores of LEP pupils to be excluded from AYP calculations for the first year of pupils’ enrollment in United States schools. If widely adopted, these policies should reduce the extent that schools or LEAs are identified as failing to meet AYP standards on the basis of the LEP pupil group.

Another aspect of this issue arises from the discretion given to states in defining major racial and ethnic groups. Neither the statute nor ED has defined this term. Some states defined the term relatively comprehensively (e.g., Maryland includes American Indian, African American, Asian, White and Hispanic pupil groups) and some more narrowly (e.g., Texas identifies only three groups — white, African American, and Hispanic). A more narrow interpretation may reduce the attention focused on excluded pupil groups. It would also reduce the number of different thresholds some schools and LEAs would have to meet in order to make AYP.

A final, overarching issue arises from the relationship between pupil diversity in schools and LEAs and the likelihood of being identified as failing to meet AYP standards. All other relevant factors being equal (especially the minimum group size criteria), the more diverse the pupil population, the more thresholds a school or LEA must meet in order to make AYP. While in a sense this was an intended result of

legislation designed to focus (within limits) on all pupil groups, the impact of making it more difficult for schools and LEAs serving diverse populations to meet AYP standards may also be seen as an unintended consequence of the NCLBA. This issue has been analyzed in a recent study by Thomas J. Kane and Douglas O. Staiger, who concluded that such “subgroup targets cause large numbers of schools to fail..., arbitrarily single out schools with large minority subgroups for sanctions..., or statistically disadvantage diverse schools that are likely to be attended by minority students.... Moreover, while the costs of the subgroup targets are clear, the benefits are not. Although these targets are meant to encourage schools to focus more on the achievement of minority youth, we find no association between the application of subgroup targets and test score performance among minority youth.”³⁷ Thus far, insufficient data are available to evaluate whether this prediction is being borne out in practice.

An additional study published by Policy Analysis for California Education (PACE)³⁸ found that when comparing public schools in California with similar aggregate pupil achievement levels, schools with larger numbers of different NCLBA-relevant demographic groups were substantially less likely to have met AYP standards in the 2002-2003 school year. Similarly when comparing California public schools with comparable percentages of pupils from low-income families, schools with larger numbers of relevant demographic groups of pupils were much less likely to have met AYP.

However, without specific requirements for achievement gains by each of the major pupil groups, it is possible that insufficient attention would be paid to the performance of the disadvantaged pupil groups among whom improvements are most needed, and for whose benefit the Title I-A program was established. Under previous law, without an explicit, specific requirement that AYP standards focus on these disadvantaged pupil groups, most state AYP definitions considered only the performance of all pupils combined. And it is theoretically possible for many schools and LEAs to demonstrate substantial improvements in achievement by their pupils overall while the achievement of their disadvantaged pupils does not improve significantly, at least until the ultimate goal of all pupils at the proficient or higher level of achievement is approached. This is especially true under a “status” model of AYP such as the one in the NCLBA, under which advantaged pupil groups may have achievement levels well above what is required, and an overall achievement level could easily mask achievement well below the required threshold by various groups of disadvantaged pupils.

Number of Schools Identified and State Variations Therein

As was discussed earlier, concern has been expressed by some analysts since early debates on the NCLBA that a relatively high proportion of schools would fail

³⁷ Thomas J. Kane and Douglas O. Staiger, *Unintended Consequences of Racial Subgroup Rules*, “No Child Left Behind? The Politics and Practice of School Accountability,” The Brookings Institution, 2003, pp. 152-176.

³⁸ John R. Novak and Bruce Fuller, *Penalizing Diverse Schools?*, PACE Policy Brief 03-4, December 2003.

to meet AYP standards. While the numbers of schools failing to meet AYP in 2002-2003 under the NCLBA provisions remain somewhat in flux, it is possible that approximately 30% of all public schools nationwide fell into this category, and that approximately 12% of all Title I-A participating schools were identified as needing improvement (i.e., failed to meet AYP standards for two or more consecutive years) on the basis of AYP determinations for 2002-2003 and the immediately preceding school years. Recent policy guidance from ED should reduce the number of schools identified as failing to meet AYP on the basis of test scores in 2003-2004 and subsequent years, as should increasing familiarity with the AYP requirements on the part of LEAs and schools. At the same time, future increases in performance thresholds, as the ultimate goal of all pupils at the proficient or higher level of achievement is approached, as well as implementation of tests in additional grades in many states,³⁹ are likely to result in higher percentages of schools failing to make AYP.

In response to these concerns, ED officials have emphasized the importance of taking action to identify and move to improve underperforming schools, no matter how numerous. They have also emphasized the possibilities for flexibility and variation in taking corrective actions with respect to schools which fail to meet AYP, depending on the extent to which they fail to meet those standards. It should also be re-emphasized that many of the schools reported as having failed to meet AYP standards for 2002-2003 have failed to meet AYP for one year only, while the NCLBA requires that a series of actions be taken only with respect to schools or LEAs participating in ESEA Title I-A that fail to meet AYP for *two or more consecutive years*.

Further, some analysts argue that a set of AYP standards that a high — 30% or more — percentage of public schools fails to meet may accurately reflect pervasive weaknesses in public school systems, especially with respect to the performance of disadvantaged pupil groups. To these analysts, the identification of large percentages of schools is a positive sign of the rigor and challenge embodied in the NCLBA's AYP requirements, and is likely to provide needed motivation for significant improvement (and ultimately a reduction in the percentage of schools so identified).

Others have consistently expressed concern about the accuracy and efficacy of an accountability system under which such a high percentage of schools is identified as failing to make adequate progress, with consequent strain on financial and other resources necessary to provide technical assistance, public school choice and supplemental services options, as well as other corrective actions. In addition, some have expressed concern that schools might be more likely to fail to meet AYP simply because they have diverse enrollments, and therefore more groups of pupils to be separately considered in determining whether the school meets AYP standards. They

³⁹ Several states do not currently administer standards-based assessments in mathematics and reading in each of grades 3-8, or assessments in science at three grade levels, as is required in future years under the NCLBA. As such assessments are administered to pupils in additional grades and subject areas, there will be increases in the number of pupil groups meeting minimum size thresholds to be considered in AYP determinations, and possibly also increases in the number of different test score thresholds that many schools and LEAs have to meet.

also argue that the application of technical assistance and, ultimately, corrective actions to such a high percentage of schools will dilute available resources to such a degree that these responses to inadequate performance would be insufficient to markedly improve performance. A few analysts even speculate that the AYP system under the NCLBA is intended to portray large segments of American public education as having “failed,” leading to proposals for large scale privatization of elementary and secondary education.⁴⁰

The proportion of public schools identified as failing to meet AYP standards in 2002-2003 is not only relatively large in the aggregate, but also varies widely among the states. As was discussed above, the percentage of public schools identified as failing to make AYP under the NCLBA provisions in 2002-2003 ranged from well under 10% to approximately three-quarters for the states for which data are available. This result is somewhat ironic, given that one of the major criticisms of the pre-NCLBA provisions for AYP was that they resulted in a similarly wide degree of state variation in the proportion of schools identified, and the more consistent structure required under the NCLBA was widely expected to lead to at least somewhat greater consistency among states in the proportion of schools identified.

It seems likely that the pre-NCLBA variations in the proportion of schools failing to meet AYP reflected large differences in the nature and structure of state AYP standards, as well as major differences in the nature and rigor of state pupil performance standards and assessments. While the basic structure of AYP definitions is now substantially more consistent across states, significant variations remain with respect to the factors discussed in this section of the report (such as minimum group size), and substantial differences in the degree of challenge embodied in state standards and assessments remain. Overall, it seems likely that the key influences determining the percentage of a state’s schools that fails to make AYP include (in no particular order): (1) degree of rigor in state content and pupil performance standards; (2) minimum pupil group size (n) in AYP determinations; (3) use of confidence intervals in AYP determinations (and whether at a 95% or 99% level of confidence); (4) extent of diversity in pupil population; (5) extent of communication about, and understanding of, the 95% test participation rule, and (6) possible actual differences in educational quality.

95% Participation Rule

It appears that in many cases, schools or LEAs failed to meet AYP for 2002-03 solely because of low participation rates in assessments — i.e., fewer than 95% of all pupils, or of pupils in relevant demographic groups meeting the minimum size threshold, took the assessments. While, as discussed above, ED recently published policy guidance that relaxes the participation rate requirement somewhat — allowing use of average rates over two- to three-year periods, and excusing certain pupils for medical reasons — the high rate of assessment participation that is required in order for schools or LEAs to meet AYP standards is likely to remain an ongoing focus of debate.

⁴⁰ See Alfie Kohn, “Test Today, Privatize Tomorrow: Using Accountability to ‘Reform’ Public Schools to Death,” *Phi Delta Kappan*, vol. 85, No. 8, Apr. 2004, pp. 568-577.

While few argue against having any participation rate requirement, it may be questioned whether it needs to be as high as 95%. In recent years, the overall percentage of enrolled pupils who attend public schools each day has been approximately 93.5%, and it is generally agreed that attendance rates are lower in schools serving relatively high proportions of disadvantaged pupils. Even though schools are explicitly allowed to administer assessments on make-up days following the primary date of test administration, and it is probable that more schools and LEAs will meet this requirement as they become more fully aware of its significance, it is likely to continue to be very difficult for many schools and LEAs to meet a 95% test participation requirement.

State Variations in Assessments and Proficiency Standards

As noted above, it is likely that state variations in the percentage of schools failing to meet AYP standards are based not only on underlying differences in achievement levels, as well as a variety of technical factors in state AYP provisions, but also on differences in the degree of rigor or challenge in state pupil performance standards and assessments. Particularly now that all states receiving Title I-A grants must also participate in state-level administration of NAEP tests in 4th and 8th grade reading and math every two years, this variation can be illustrated for all states by comparing the percentage of pupils scoring at the proficient level on NAEP versus state assessments.

Such a comparison was conducted by a private organization, Achieve, Inc., based on 8th grade reading and math assessments administered in the spring of 2003.⁴¹ For a variety of reasons (e.g., several states did not administer standards-based assessments in reading or math to 8th grade pupils in 2003), the analysis excluded several states; 29 states were included in the comparison for reading, and 32 states for math. According to this analysis, the percentage of pupils statewide who score at a proficient or higher level on state assessments, using state-specific pupil performance standards, was generally much higher than the percentage deemed to be at the proficient or higher level on the NAEP tests, and employing NAEP's pupil performance standards. Of the states considered, the percentage of pupils scoring at a proficient or higher level on the state assessment was lower than on NAEP (implying a more rigorous state standard) for five states⁴² (out of 32) in math and only two states (out of 29) in reading. Further, among the majority of states where the percentage of pupils at the proficient level or above was found to be higher on state assessments than on NAEP, the relationship between the size of the two groups varied widely — in some cases only marginally higher on the state assessment, and in others the percentage at the proficient level was more than twice as high on the state assessment as on NAEP. While some portion of these differences in performance may result from differences in the motivation of pupils to perform well (and of teachers to encourage high performance) on NAEP versus state assessments, comparisons to NAEP results help to illuminate the variations in state proficiency

⁴¹ Center on Education Policy, *From the Capital to the Classroom, Year 2 of the No Child Left Behind Act*, p. 61.

⁴² In two additional states, the percentages were essentially the same.

standards. It is not yet clear whether such comparisons will significantly encourage greater consistency in those standards.

A second issue is whether some states might choose to lower their standards of “proficient” performance, in order to reduce the number of schools identified as failing to meet AYP and make it easier to meet the ultimate NCLBA goal of all pupils at the proficient or higher level within 12 years. In the affected states, this would increase the percentage of pupils deemed to be achieving at a “proficient” level, and reduce the number of schools failing to meet AYP standards.

While states are generally free to take such actions without jeopardizing their eligibility for Title I-A grants, since performance standards are ultimately state-determined and have always varied significantly, such actions have elicited public criticism from ED. In a policy letter dated October 22, 2002, the Secretary of Education stated that

Unfortunately, some states have lowered the bar of expectations to hide the low performance of their schools. And a few others are discussing how they can ratchet down their standards in order to remove schools from their lists of low performers. Sadly, a small number of persons have suggested reducing standards for defining “proficiency” in order to artificially present the facts Those who play semantic games or try to tinker with state numbers to lock out parents and the public, stand in the way of progress and reform. They are the enemies of equal justice and equal opportunity. They are apologists for failure.⁴³

Timing

Timing is an issue mainly because of the different effective AYP standards applicable to different school years. There are concerns regarding the application of inconsistent AYP standards in determining whether schools should be identified as needing improvement currently and over the next couple of years. There are two major dimensions to this issue. First, AYP determinations for years through 2001-2002 were made on the basis of widely varying pre-NCLBA state AYP standards. Second, even after the NCLBA began to be implemented, the degree of flexibility explicitly provided to states in several specific aspects of AYP determination have changed over time, so that even the post-NCLBA AYP criteria are not consistent from year to year. This raises at least two questions: (a) should corrective actions be applied to schools or LEAs on the basis of two or more consecutive years of failure to meet AYP, when those AYP standards have materially differed over the relevant time period; and (b) should states and LEAs be allowed to apply currently authorized forms of flexibility to revise AYP determinations for previous years?

With respect to (a), states and LEAs used pre-NCLBA standards for determining AYP for school years through 2001-2002, and varying corrective actions are to be taken with respect to schools that fail to meet AYP standards for up to five or more consecutive years. The relative significance of this aspect of the timing issue was greatest during the initial transition to the NCLBA — i.e., in the 2002-2003 and 2003-2004 school years — but it will remain somewhat significant for the next three

⁴³ See [<http://www.ed.gov/news/pressreleases/2002/10/10232002a.html>].

years at least. The fact that corrective actions taken during the 2002-2003 school year were totally, and those taken during 2003-2004 and for the following few years will be partially, based on pre-NCLBA AYP standards raises concerns based on the wide variation in the structure and nature of pre-NCLBA AYP standards, as well as the fact that the pupil assessments which form the basis for AYP determinations were in many states “transitional” assessments which did not meet either the “1994 requirements” or those of the NCLBA. For example, those assessments may not have been linked to state content and achievement standards.

A more immediate issue involves debates over whether recently announced forms of flexibility in the implementation of the NCLBA AYP provisions may be applied to AYP determinations for previous (but still post-NCLBA) years. As is discussed above, ED has over the last several months published regulations and/or policy guidance providing additional flexibility with respect to three aspects of AYP calculations: pupils with disabilities, LEP pupils, and assessment participation rates. All of these forms of flexibility take effect with respect to AYP determinations based on assessments administered during the 2003-2004 school year. However, it is ED’s position that these new forms of flexibility cannot be applied to revise AYP determinations for the previous school year, 2002-2003, which was the first year of AYP determinations based on the NCLBA.⁴⁴ According to ED, this is because such regulations or policy guidance cannot be retroactively applied without explicit statutory authority for such retroactive application.

In contrast, some Members of Congress argue that states and LEAs ought to be allowed to recalculate AYP determinations for 2002-2003, applying all currently allowed forms of flexibility. Bills have been introduced in the House and Senate (H.R. 4605 and S. 2542) to allow such retroactive recalculation of AYP determinations for the 2002-2003 school year, if requested by schools or LEAs that have been identified as failing to meet AYP for that year. If a school previously identified as failing to meet AYP standards in 2002-2003 was found to have met the standards after such recalculation, then most corrective actions taken with respect to the school as a result of such recalculation would be terminated; however, pupils provided with supplemental services would continue to receive them for the remainder of the school year, and pupils taking advantage of school choice options would continue to have those options available to them until completion of the highest grade of the school to which they have transferred.

Unfortunately, insufficient data are available to make it possible to estimate the number of schools or LEAs whose identification as failing to meet AYP for 2002-2003 might be reversed if AYP were recalculated using all currently available forms of flexibility. In order to do this, one would need to know: (a) the number of schools and LEAs that failed to meet AYP *solely* because of their disabled or LEP pupil groups; and (b) how many of these AYP determinations would be reversed if current

⁴⁴ The situation regarding pupils with disabilities differs from those of LEP pupils and participation rates, because ED had previously published draft regulations (Mar. 20, 2003) providing a degree of flexibility roughly comparable to that in the final regulations (published Dec. 9, 2003).

forms of flexibility were applied. While (a) is known in a limited number of cases, (b) is not.

ED has argued that aside from the principle of retroactivity, recalculation of 2002-2003 AYP determinations would at this point be disruptive, and the issue is of limited significance because corrective actions are taken with respect to schools or LEAs only after *two or more consecutive years* of failure to meet AYP, so *one* year of determinations under less flexible policy guidance would not alone lead to substantive consequences. However, this overlooks the fact that a number of schools may have been determined to fail to meet AYP for 2001-2002 under pre-NCLBA requirements, then again for 2002-2003 under NCLBA requirements more strict than currently, but might not have failed to meet today's more flexible requirements if applied to determinations for 2002-2003.

In addition, some of the newly-authorized forms of flexibility reflect policies that some states had already adopted as part of their initial NCLBA accountability plans, and have already applied in making AYP determinations for 2002-2003. For example, one of the key aspects of the expanded flexibility regarding LEP pupils in AYP determinations is that schools and LEAs may continue to include pupils in the LEP demographic category for up to two years after they have attained proficiency in English. Some states, such as Indiana, already had such a provision in their original NCLBA AYP standards, and were applying it to the AYP determinations for 2002-2003. Thus, this form of flexibility was available to, and used by, some states in 2002-2003, but not others. Of course, as was discussed above, there are significant variations and inconsistencies in several important aspects of AYP standards (e.g., minimum group size or use of confidence intervals) among states, whether for 2002-2003 or 2003-2004.